Global data usage is exploding: up sixty-three percent in 2016, eighteen-fold from 2011 to 2016, and projected to increase at least seven-fold by 2021.1 With this growing demand for connectivity, wireless carriers and other network providers are investing billions in the U.S. in a race to deploy new technologies that can handle this rapid increase in traffic and meet customer demand.

These next generation technologies, commonly called “5G,” will have speeds above 1 Gbps and extremely low latency. 5G will have a significant impact on productivity for nearly every industry, providing a critical platform for innovative Internet of Things (IoT) devices and smart cities, and create significant economic value.

The U.S. government must promote 5G development and robust communications networks, because according to the OECD, the U.S. lags behind many of its economic competitors, including many European countries, in broadband access and speeds.2 5G technology will require greater network densification with small cells to increase performance, but often federal, state, and local policies stand in the way with rules that are ill-suited for new technologies.

The U.S. needs a boost to be the world leader on 5G. CCIA proposes six broadband infrastructure reforms (the “B6”) that the House and Senate should put into bipartisan legislation to pave the way to 5G:

1. **Promoting backhaul deployment and access, including a “Dig Once” policy as in H.R. 4800**

   Wireless connectivity needs backhaul. Small cell sites must be connected so they can work together and form a robust network. A Dig Once policy is common sense and bipartisan. Digging and installing conduits that can house fiber cables whenever roads are constructed with federal money will save money and time and promote broadband access.

2. **Harmonizing shot clocks and promoting deemed granted remedies for wireless siting**

   Small cell deployments could reach 455,000 by 2020 and 800,000 by 2026,3 but progress will be delayed if localities and states apply existing rules on rights of way and fees that were designed for macro cells to small cells. Instead, they should streamline processes, fees should only be based on reasonable costs, and shot clocks on application reviews should be harmonized.

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Updating federal siting processes and promoting greater certainty

Federal review and consultation processes help ensure that critical environmental and historic interests are protected and that Tribal Nations and their lands are respected. However, these processes should be reviewed because providers often incur significant costs and delays.

The federal government owns about 28% of the 2.27 billion acres of land in the United States. Siting wireless facilities on federal lands and buildings can result in huge savings and speed deployment to underserved areas as long as the rates and fees are reasonable and based on the direct costs.

There should be an inventory of federal assets that could be available for communications equipment, as in H.R. 4798 and H.R. 4839; common application forms and cost-based fees for placing communications facilities on federal lands and buildings, as in H.R. 4795; and batch or consolidated applications.

Addressing pole attachments, including a “Climb Once” policy as in H.R. 4858

It can take five months or even longer to process pole attachment requests. A one-touch make-ready or Climb Once policy would reduce the cost of deployment, give the existing pole owner a say in who prepares a pole for another antenna, and make a locality more attractive to providers because of the decreased costs and increased efficiencies.

Analyzing how broadband deployment and adoption help the U.S. economy as in S. 645

Government, expert, and industry stakeholders can help policymakers understand the importance of connectivity and how the advent of advanced technologies—like 5G—can foster emerging innovations like IoT. They should consider analyses of how high-speed broadband supports our economy by promoting job creation and online commerce.

Providing dedicated funding to promote broadband buildout

The President and Congress have announced plans for promoting infrastructure across the country, particularly bringing broadband connections to rural and underserved communities. It is critical that the federal government provide dedicated funding to support buildout to areas where it could be cost-prohibitive to install facilities due to geographical or other constraints.

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4 https://fas.org/sgp/crs/misc/R42346.pdf
5 See 47 C.F.R. § 11420.